

REMARKS

This application is amended in a manner to place it in condition for allowance at the time of the next Official Action.

Claims 41, 43, 45, 47, 48, 51, 58 and 59 are amended. Support for the amendment to the claims may be found generally throughout the specification.

Claim 44 is canceled.

Claims 41-43 and 45-79 remain pending in the application.

Claims 78 and 79 are withdrawn from further consideration for being directed to a non-elected invention.

The Official Action does not consider the IDS filed December 17, 2004 for the reason that it does not comply with 37 CFR §1.98. For the Examiner's convenience, the IDS filed December 17, 2004 is provided in the Appendix of the present amendment, including the required patents and the publication which caused the patents to be listed.

The Official Action rejects claims 43, 45, 47, 48, 51, 58 and 59 under 35 USC §112, second paragraph, as being indefinite.

Applicants acknowledge with appreciation the suggestions made in the Official Action for reciting the claimed subject matter of claims 43, 45, 48, 58 and 59 in a definite manner. Accordingly, claims 43, 45, 48, 58 and 59 are amended as suggested in the Official Action.

As to claims 47 and 51, the Official Action points out that there are undefined symbols in these claims.

However, the term "solubility factor" is a typographical error for "solubility parameter". Support for this amendment is found on page 19, lines 11-18 of the English description of the present application. The term " \square value" is a typographical error for " δ value". Support for this amendment is found in original claim 8. A person skilled in the art would easily understand that these are typographical errors.

On the other hand, the term "solubility parameter" is commonly used in the field that the present invention pertains. Therefore, amended claim 47 is definite and clear. Moreover, the term "solubility parameter" is fully explained in the present description (page 19, line 5 to page 20, line 23). However, applicants respectfully provide the Examiner references that deal with theory of solubility parameters in greater details. See, e.g., the Appendix of this amendment for three printouts from a website discussing the theory of solubility parameters.

More specifically, the solubility parameter can be calculated from the molecular structure according to the Fedors method (see page 20, lines 13-15 of the description). This method has been widely used in the field since first published by R.F. Fedors in 1974 and was commonly known at the time of invention. Specifically, Fedors teaches that the solubility parameters for liquids at 25°C can be written

$$\delta = \left[\frac{\sum_i \Delta e_i}{\sum_i \Delta v_i} \right]^{1/2} \quad (28)$$

where Δe_i and Δv_i are provided in Table 5 (please see page 153, right column and page 152, right column for the equation (28) and Table 5, respectively). See, e.g., the Appendix of this amendment for a copy of the original paper published by Fedors.

With respect to claim 51, the term "□m" is a typographical error for "μm". Support for this amendment is found in original claim 12. A person skilled in the art would easily understand that this is a typographical error. The term "μm" is commonly used in every field of sciences to indicate 10^{-6} m.

As to claim 59, claim 59 is rewritten in independent form to recite claim limitations of claims 59, 58, 57, 55, 54 and 41.

Therefore, the claims are definite, and withdrawal of the rejection is respectfully requested.

Claims 41-77 are rejected under 35 USC §102(a) as being clearly anticipated by WO 03/033053 (WO '053). This rejection is respectfully traversed.

Regardless of the ability of this publication to teach that for which it is offered, the publication does not qualify as prior art.

The present application claims priority to Japanese Application Nos. 2002-176332 and 2002-176333, which were both filed on June 17, 2002. Verified English translations for the priority documents JP 2002-176332 and JP 2002-176333 are included in the Appendix of this amendment. Thus, the claim for priority has been perfected, and WO '053 fails to qualify as prior art.

Therefore, withdrawal of the rejection is respectfully requested.

Claims 41-43 and 45-77 are rejected under 35 USC §102(b) as being clearly anticipated by U.S. 5,407,581 (U.S. '581). This rejection is respectfully traversed.

U.S. '581 is offered for teaching a polymer similar to that as recited in claims 41-43 and 45-77.

However, claim 41 is amended to include the features previously recited in claim 44, which, as acknowledged by the Official Action, are not disclosed by U.S. '581. Thus, U.S. '581 cannot anticipate the claimed invention.

Therefore, withdrawal of the rejection is respectfully requested.

Claims 41-77 are rejected under 35 USC §103(a) as being unpatentable over WO '053. This rejection is respectfully traversed.

As discussed above, WO '053 does not qualify as prior art.

Therefore, withdrawal of the rejection is respectfully requested.

Claims 41-43 and 45-77 are rejected under 35 USC §103(a) as being unpatentable over U.S. '581 and JP 2001-300221 (JP '221). This rejection is respectfully traversed.

U.S. '581 is offered for the reasons discussed above.

However, as discussed with respect to the anticipation rejection, U.S. '581 fails to disclose or suggest the features previously recited in claim 44, which are presently recited in independent claims 41 and 59.

Therefore, withdrawal of the rejection is respectfully requested.

The Official Action asks that applicant to provide a list of co-pending applications that set forth similar subject matter to the present claims. The co-pending application is WO 03/033053, which is already of record.

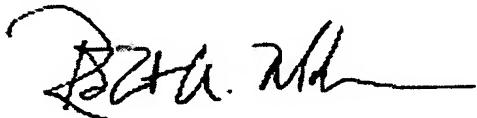
In view of the amendment to the claims and the foregoing remarks, the present application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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